AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for encoding data within a communication system, the method comprising the steps of:

   receiving a data rate; and

   setting an initial state of a convolutional encoder ~~from a set of at least two~~ ~~allowable initial states~~ based on the data rate, wherein at least one initial state of the at least two allowable initial states is a non-zero state.

2. (Original) The method of claim 1 wherein the step of receiving the data rate comprises the step of receiving a data rate from the group consisting of full, ½, ¼, and 1/8th rate.

3. (Original) The method of claim 1 wherein the step of setting the initial state of the convolutional encoder based on the data rate comprises the step of setting an initial state of the encoder that is different for all possible data rates.

4. (Original) The method of claim 1 further comprising the step of encoding data with the convolutional encoder based on the data rate.

5. (Currently Amended) A method for decoding data within a communication system, the method comprising the steps of:

   receiving data;

   setting an initial state of a Trellis diagram from a set of at least two allowable initial states based on a data rate, wherein at least one initial state of the at least two allowable initial states is a non-zero state; and

   utilizing the Trellis diagram to decode the data.

6. (Original) The method of claim 5 further comprising the step of setting a final state of the Trellis diagram based on the data rate.

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7. (Original) The method of claim 5 wherein the step of receiving the data comprises the step of receiving data having a frame rate from the group consisting of full, ½, ¼, and 1/8th rate.

8. (Original) The method of claim 5 wherein the step of setting the initial state of the Trellis diagram based on the data rate comprises the step of setting an initial state of the Trellis diagram that is different for all possible data rates.

9. (Original) The method of claim 5 further comprising the step of passing decoding characteristics to a Rate Determining Algorithm (RDA).

10. (Currently Amended) A convolutional encoder comprising:
        means for receiving a data rate; and
        means for determining an initial state of the encoder from a set of at least two allowable initial states based on the data rate, wherein at least one initial state of the at least two allowable initial states is a non-zero state.

11. (Original) The convolutional encoder of claim 10 wherein the rate is a frame rate.

12. (Original) The encoder of claim 11 wherein the frame rate is a frame rate from the group consisting of Full, ½, ¼, and 1/8th rate frames.

13. (Original) The encoder of claim 12 wherein the initial state is different for all possible rates.

14. (Currently Amended) An apparatus comprising:
        means for receiving data; and
        means for decoding the received data utilizing a Trellis diagram having an initial and a final state based on a transmission rate, wherein the initial state of the Trellis diagram is one of at least two allowable initial states and wherein at least one initial state of the at least two allowable initial states is a non-zero state.

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15. (Original) The apparatus of claim 14 wherein the transmission rate is a frame rate.

16. (Original) The apparatus of claim 15 wherein the frame rate is a frame rate from the group consisting of Full, ½, ¼, and 1/8th rate frames.

17. (Original) The apparatus of claim 16 wherein the initial state is different for all possible rates.

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